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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--------------------------------|-----------------------------------|----------------------|---------------------|------------------|--|
| 10/540,880 | 06/27/2005 | Kenji Inagaki | Q88345 | 1798 | |
| 23373 7 SUGHRUE MIC | 7590 01/12/200 ON. PLLC | 7 | EXAMINER | | |
| 2100 PENNSYLVANIA AVENUE, N.W. | | | SALVATORE, LYNDA | | |
| | SUITE 800 WASHINGTON, DC 20037 | | ART UNIT | PAPER NUMBER | |
| | | | 1771 | | |
| | | | | | |
| SHORTENED STATUTORY | PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MON | 2HTI | 01/12/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|---|--|--|--|----------|
| | | Application No. | Applicant(s) | |
| Office Action Summary | | 10/540,880 | INAGAKI, KENJI | |
| | | Examiner | Art Unit | |
| | | Lynda M. Salvatore | 1771 | |
| The MAILING Period for Reply | DATE of this communication ap | pears on the cover sheet wi | th the correspondence address | , |
| WHICHEVER IS LO - Extensions of time may be after SIX (6) MONTHS fro - If NO period for reply is sp Failure to reply within the Any reply received by the | NGER, FROM THE MAILING DE available under the provisions of 37 CFR 1. In the mailing date of this communication. | DATE OF THIS COMMUNIC 136(a). In no event, however, may a r will apply and will expire SIX (6) MON te, cause the application to become AB | eply be timely filed ITHS from the mailing date of this communicat BANDONED (35 U.S.C. § 133). | |
| Status | | | | |
| 1) Responsive to | communication(s) filed on 27 | lune 2005. | | |
| 2a)☐ This action is | FINAL. 2b)⊠ Thi | s action is non-final. | | |
| 3) Since this app | lication is in condition for allowa | ance except for formal matt | ers, prosecution as to the merits | is |
| closed in acco | rdance with the practice under | Ex parte Quayle, 1935 C.D |). 11, 453 O.G. 213. | |
| Disposition of Claims | | | | |
| 4)⊠ Claim(s) 1-16 | is/are pending in the application | 1. | | |
| | ve claim(s) is/are withdra | | • | |
| 5) Claim(s) | _ is/are allowed. | | | |
| 6)⊠ Claim(s) <u>1-16</u> | is/are rejected. | | | |
| 7) Claim(s) | | | • | |
| 8) Claim(s) | _ are subject to restriction and/ | or election requirement. | | |
| Application Papers | | | | |
| 9) The specificati | on is objected to by the Examin | er. | • | |
| 10) The drawing(s | filed on is/are: a) ac | cepted or b) objected to | by the Examiner. | |
| Applicant may r | not request that any objection to the | e drawing(s) be held in abeyar | nce. See 37 CFR 1.85(a). | |
| • | • | | (s) is objected to. See 37 CFR 1.12 | |
| 11)☐ The oath or de | claration is objected to by the E | xaminer. Note the attached | d Office Action or form PTO-152. | , |
| Priority under 35 U.S.C | C. § 119 | | | |
| • | ent is made of a claim for foreig | n priority under 35 U.S.C. § | \$ 119(a)-(d) or (f). | |
| | ome * c) None of: | | · · · · · · · · · · · · · · · · · · · | |
| ·— ·— | d copies of the priority documer | its have been received. | | |
| 2. Certified | d copies of the priority documer | its have been received in A | opplication No | |
| | | | received in this National Stage | |
| | ion from the International Burea | | | |
| * See the attache | d detailed Office action for a lis | t of the certified copies not | received. | |
| | | | | |
| Attachment(s) 1) Notice of References C | ited (PTO-892) | A) T Interview 9 | Summary (PTO-413) | |
| 2) Notice of Draftsperson' | s Patent Drawing Review (PTO-948) | Paper No(| s)/Mail Date | |
| 3) Information Disclosure Paper No(s)/Mail Date | | 5) Notice of I | nformal Patent Application | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pike et al., US 6,090,731 in view of Yamamoto, EP 1 110 988 A1.

The patent issued to pike et al., teach forming a conjugate fiber comprising a thermoplastic polyolfin such a polypropylene and polyester such as polyethylene terephthalate (abstract column 5, 7-47). With regard to the staple fiber limitations set forth in claim 1, Pike et al., defines the term "fibers" include staple fibers (column 2, 50-55). With regard to the fiber shape limitations set forth in claims 8 and 9, Pike et al., teach forming side-by-side and concentric sheath/core configurations (column 5, 60-column 6, 10). With regard to the ratio of the thermoplastic and polyester, Pike et al., teach employing between 10-90% polyolefin (column 5, 8-25). As such, the claimed ratio limitations set forth in claim 10 would inherently be met. With regard to the non-woven fabric limitations, Pike et al., teach forming a non-woven fabric from the conjugate filaments (column 6, 31-35).

Pike et al., fails to teach the claimed polyester formed from the reaction of the compounds set forth in claims 1-7, however, the published EP application discloses the claimed polyester (abstract). Said polyester is further melt-spun. Though, the published EP application does not explicitly disclose melt-spinning the polyester into fibers, it is generally known in the

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art that melt-spinning is used to form fibers. Said polyester composition exhibits good color tone and excellent forming properties (abstract). Specifically, with regard to the catalyst limitations set forth in claim 1, see the abstract. With regard to the reaction products set forth in claim 1, see abstract and sections 0014-0015). With regard to claim 2, see section 0019. With regard to claim 3, see section 0033. With regard to claim 4, see section 0030. With regard to claims 5 and 6, see section 0042. With regard to claim 7, see sections 0047-0048.

Therefore, motivated by the desire to produce a conjugate fiber having good color tone and excellent forming properties, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the polyester component in the conjugate fibers taught by Pike et al., with the polyester composition disclosed in the published EP application.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pike et al., US 6,090,731 in view of Yamamoto, EP 1 110 988 A1 as applied to claim 1 above and further in view of Colman et al., US 6,384,297.

The combination of prior art fails to teach the claimed fiber thickness and length as well as the method of forming the non-woven fabric, however, the patent issued to Colman et al., teach conjugate binder staple fibers having a length of less 6mm and dtex of 2.2 (column 8, 60-65 and column 9, 25-45). With regard to claim 12, Colman et al., teach forming an air laid non-woven (column 8, 25-50 and column 9, 13-20). Colman et al., further teach thermal bonding (column 10, 60-65). Colman et al., teach forming disposable garments (claim 1).

Therefore, motivated by the desire to form a non-woven fabric suitable for use in disposable garment applications, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to form the conjugate staple fibers of Pike et al., view of the published EP application having the claimed dtex and length as taught by Colman et al. With regard to the air-laying process, it is commonly known in the art that air-laying processes using staple length fibers as evidenced by Colman et al., form non-woven fabrics. Thus, it would be within the skill of a worker in the art to select a compatible fabric forming method for the staple length fibers.

With specific regard to claim 14, the combination of prior art fails to teach the process of interlacing before heat treatment; however, it is the position of the Examiner that said limitation constitutes a method limitation not germane to the final product structure.

The presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to product. *In re Stephens*, 145 USPQ 656

The claimed product appears to be the same or similar to that of the prior art, although produced by a different process. As such, the burdens shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,292

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 8, 2007